

ATTACHMENT 4

16 VIDEOTAPED DEPOSITION OF KEVIN C. ALMEROOTH
17 San Francisco, California
18 Tuesday, June 28, 2016

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CARLA SOARES

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25 Pages 1 - 296

1	San Francisco, California	1	other times I've testified under deposition. I	08:36:01
2	Tuesday, June 28, 2016	2	don't know that there's a distinction in what	
3	8:34 a.m.	3	Mr. Holmes said.	
4		4	Q Okay. Are you asking the court to	
5	PROCEEDINGS	5	recognize you as an expert in this matter?	08:36:14
6	THE VIDEO OPERATOR: Good morning. We're	6	A I don't know that I'd be asking the court	
7	on the record. The time is 8:34 a.m., and the date	7	to do that, but certainly, I think my qualifications	
8	is June 28th, 2016. This begins the videotaped	8	justify that the court see me as an expert.	
9	deposition of Dr. Kevin Almeroth.	9	Q On what subjects relevant to the opinions	
10	My name is Sean Grant, here with our court	10	expressed in your reports do you claim to be an	08:36:37
11	reporter, Carla Soares. We're here from Veritext	11	expert?	
12	Legal Solutions at the request of counsel for	12	A I'm not sure I understand the question. I	
13	defendant.	13	don't know that I can sit here and come up with the	
14	This deposition is being held at Keker &	14	definitive list of subjects.	
15	Van Nest LLP in San Francisco, California. The	15	I think on any of the subjects that I	08:36:58
16	caption of this case is Cisco Systems, Inc., versus	16	testify about and offer opinions about, I believe	
17	Arista Networks, Inc., Case No. 5:14-cv-05344-BLF.	17	I'm qualified as an expert.	
18	Please note that audio- and	18	Q Are you an expert in computer science?	
19	video-recording will take place unless all parties	19	A I believe I am.	
20	have agreed to go off the record. Microphones are	20	Q Are you an expert in networking	08:37:09
21	sensitive and may pick up whispers, private	21	technology?	
22	conversations, or cellular interference.	22	A I believe I am.	
23	At this time, will counsel please identify	23	Q Are you an expert in network device	
24	themselves and state whom they represent.	24	operating systems?	
25	MR. HOLMES: Drew Holmes on behalf of	25	A I believe I am.	08:37:19
		Page 6		Page 8
1	Cisco, as well as the witness, from Quinn Emanuel.	1	Q From -- for how many different network	08:37:24
2	MR. SILBERT: David Silbert, Keker &	2	device vendors have you reviewed any source code for	
3	Van Nest, on behalf of defendant Arista.	3	their network device operating systems?	
4	MR. WONG: Ryan Wong of Keker & Van Nest	4	MR. HOLMES: Objection. Vague.	
5	on behalf of Arista.	5	THE WITNESS: Generally speaking, or just	08:37:39
6	THE VIDEO OPERATOR: And also present?	6	in the conjunction -- just in conjunction with this	
7	MR. BLACK: I'm John Black. I'm an expert	7	case?	
8	witness for Arista.	8	BY MR. SILBERT:	
9	THE VIDEO OPERATOR: Will the certified	9	Q Well, why don't we take them one by one.	
10	court reporter please swear in the witness.	10	First, in conjunction with this case, for	08:37:47
11	KEVIN C. ALMEROOTH,	11	how many network device vendors have you reviewed	
12	having been administered an oath, was examined and	12	any source code for their network device operating	
13	testified as follows:	13	systems?	
14	EXAMINATION	14	A Sitting here right now, I specifically	
15	BY MR. SILBERT:	15	recall two: Cisco and Arista. There might have	08:38:04
16	Q Good morning, Dr. Almeroth.	16	been others. I just don't remember them.	
17	A Good morning.	17	Q And generally speaking, for how many	
18	Q A minute ago counsel for Cisco introduced	18	different network device vendors have you reviewed	
19	himself as representing Cisco and also representing	19	any source code for their network device operating	
20	you in your capacity as a witness.	20	systems?	08:38:22
21	Is it your understanding that you're being	21	A Maybe ten.	
22	represented in your capacity as a witness today by	22	Q Can you name them?	
23	the Quinn Emanuel law firm?	23	A In addition to Cisco and Arista, I believe	
24	A I don't have an understanding that the	24	I've reviewed source code for A10, maybe F5, 3Com.	
25	representation is any different than any of the	25	Quagga is an open source so I've looked at source	08:38:49
		Page 7		Page 9

<p>1 device and then looking at source code and 08:45:50 2 potentially even parsing-related source code. 3 Q In what context did you review 4 parsing-related source code for Foundry's network 5 operating system? 08:46:07 6 A It would have been in the context of 7 litigation. I think there's a case in my CV. I'm 8 not sure how significant any of the parsing 9 functionality was to that case. It might have been 10 fairly cursory. 08:46:21 11 I would need a few minutes to try and dig 12 into the recesses of long-term memory and see if I 13 could even remember what that case was about. 14 Q Do you consider yourself an expert in 15 reading emails and knowing what the authors of those 08:46:40 16 emails intended? 17 MR. HOLMES: Objection. Vague and 18 compound. 19 THE WITNESS: I don't know by what 20 criteria you would use to determine whether somebody 08:47:01 21 was an expert. I'm not sure that some particular 22 expertise is required to look at an email, so I'm 23 not sure I can really answer that question. 24 But I certainly can say that, especially 25 in technical disciplines, looking at emails, I can 08:47:22</p>	<p>1 to do that? Or is that simply something you can do 08:48:38 2 in the same way a layperson can do? 3 MR. HOLMES: Same objections, and it's 4 also compound. 5 THE WITNESS: Again, I'm not sure what 08:48:50 6 threshold you're using for expertise, what skill set 7 you would particularly identify as qualifying 8 somebody as an expert beyond that of a layperson. 9 And as I've said in previous answers, I 10 certainly think I have the capability to look at 08:49:06 11 emails. And specifically the emails that I did look 12 at in this case, I don't think I'm, in this case, 13 attempting to intuit any special knowledge of that 14 person beyond simply what the emails state in the 15 context of all of the other evidence. 08:49:29 16 BY MR. SILBERT: 17 Q So you're not expressing an opinion on 18 what the state of mind of any Arista employee was at 19 any time beyond what, in your view, the emails 20 state? 08:49:41 21 MR. HOLMES: Objection. Calls for a legal 22 conclusion, vague. 23 THE WITNESS: Well, I think the report 24 speaks for itself. I don't think I can sit here and 25 offer a qualification of my opinions in the way that 08:49:51</p>
<p>Page 14</p> <p>1 certainly see what they say and understand the 08:47:26 2 context in which they offer what they've said. 3 BY MR. SILBERT: 4 Q You can explain the technical issues 5 related to an email that discusses technical issues 08:47:39 6 in your field; is that right? 7 A That's part of what my answer was. And 8 for at least that part of it, I think that's 9 correct. 10 Q Do you claim to have some special 08:47:55 11 knowledge of the state of mind of Arista employees 12 at any particular point of time? 13 MR. HOLMES: Objection. Vague, calls for 14 a legal conclusion. 15 THE WITNESS: I'm not sure what you mean 08:48:11 16 by "special knowledge." 17 I certainly can look at an email in the 18 context of a collection of emails and see the words 19 that were written in that email, and consider that 20 email in the context of other evidence, and use it 08:48:24 21 to support a conclusion that I've reached. I think 22 I have that ability. 23 BY MR. SILBERT: 24 Q But do you consider yourself to be an 25 expert with particular training and qualifications 08:48:35</p>	<p>1 you've expressed it. I don't know that that's 08:49:56 2 necessarily accurate. 3 I think that the opinions in the report 4 are what they are, and I think the report speaks for 5 itself. 08:50:04 6 BY MR. SILBERT: 7 Q Do you claim to be an expert at comparing 8 works to determine if one was plagiarized from 9 another? 10 MR. HOLMES: Objection. Vague as to 08:50:21 11 "works." 12 THE WITNESS: Again, I'm not sure what 13 threshold you're using for expertise there. 14 Certainly, I have spent a lot of time in 15 the last 20 years looking at student assignments and 08:50:34 16 source code and attempted to determine instances of 17 plagiarism. 18 I've also done a fair amount of research 19 in developing tools that can assist in plagiarism 20 detection and using those tools. And that involves 08:50:54 21 a multistep process that I think I have a lot of 22 experience in. 23 So I think, generally speaking, certainly 24 based on both the experiences I've had as an 25 instructor, the research that I've done, and all of 08:51:12</p>

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<p>1 Q Did you use any of the software tools 08:58:00 2 described here in paragraphs 31 and 32 to compare 3 any work by Arista with any work by Cisco? 4 A No. It wasn't necessary. 5 Q Why not? 08:58:18 6 A I think when you look at the testimony of 7 witnesses who have basically admitted to copying, 8 that it really isn't necessary to then go and use a 9 tool. 10 So when you have the 30(b)(6) witnesses 08:58:32 11 from Arista testifying that they copied, when you 12 have documents showing that they copied both 13 conceptually, that it really isn't necessary to go 14 off and use one of these tools. 15 For example, if I had two students who 08:58:53 16 came to me and said, "My conscience or our 17 consciences got the better of us and we want to 18 admit that we copied our assignments," I'm not sure 19 I would then have to go through and do a comparison 20 using a tool. 08:59:11 21 It's also the case that there are other 22 ways to detect existences of similarity. For 23 example, the ones that I've included in my report. 24 So it wasn't really necessary to go 25 through and use something like PAIRwise or MOSS. 08:59:27</p> <p>Page 22</p>	<p>1 MR. HOLMES: Objection. Vague. 09:00:48 2 THE WITNESS: It depends on the tool. But 3 one of the things -- and actually the version of the 4 tool was different. But one of the things that you 5 can produce as output from the second version of 09:01:02 6 PAIRwise is a side-by-side comparison of two 7 documents, or a similarity matrix for all of the 8 documents in a corpus. Something like that. 9 BY MR. SILBERT: 10 Q And what is a similarity matrix for all 09:01:19 11 documents in a corpus? 12 A So one of the things that is a challenge 13 in a classroom that isn't really the challenge here 14 is looking at each student compared to every other 15 student, to do kind of a comparison of every student 09:01:40 16 to every other student. 17 In this instance, you really only have the 18 two parties, Cisco and Arista. 19 So that a comparison matrix would say, for 20 a particular student paper, it has a similarity 09:01:58 21 score as compared to every other student in the 22 class, and then to do that in a two-dimensional 23 matrix. 24 Q If you had wanted to, could you have 25 created a similarity score comparing the command -- 09:02:12</p> <p>Page 24</p>
<p>1 Q So is it your opinion that the plagiarism 08:59:32 2 tools and systems that you developed are not 3 relevant to the opinions you've expressed in this 4 matter? 5 MR. HOLMES: Objection. Misstates prior 08:59:41 6 testimony. 7 THE WITNESS: I'm not -- first of all, I 8 didn't say that. 9 Second, I'm not sure, really, what you 10 mean by "relevant." 08:59:50 11 As part of an analysis, it could have been 12 a tool I could have used. I don't really think 13 there's any disagreement, even among the experts, 14 that there wasn't copying. 15 And for tools like PAIRwise and MOSS, part 09:00:10 16 of their function is to be able to determine whether 17 or not there are phrases or sentences or paragraphs 18 or some amount of material that is copied. 19 But I didn't feel that I needed to use 20 those tools, given the voluminous amount of evidence 09:00:31 21 that exists in this case with respect to the fact 22 that copying did, in fact, take place 23 BY MR. SILBERT: 24 Q When you use a tool like PAIRwise or MOSS, 25 what output does it give you? 09:00:44</p> <p>Page 23</p>	<p>1 CLI command reference manuals for multiple different 09:02:18 2 switch vendors including, say, Cisco, Arista, Dell, 3 HP, Brocade, Juniper, JunosE, and others? 4 MR. HOLMES: Objection. Vague, compound 5 and incomplete hypothetical. 09:02:37 6 THE WITNESS: The first answer is I 7 suppose anything is hypothetically possible. 8 BY MR. SILBERT: 9 Q I'm sorry to interrupt. Let me just 10 address that. 09:02:55 11 My question was, using the software tools 12 that you've been testifying about, could you have 13 done that? 14 A Sure. 15 So for example, PAIRwise -- as I was 09:03:04 16 answering before, anything is hypothetically 17 possible. The basic functionality of PAIRwise is to 18 take a repository, a directory of documents, and to 19 perform a comparison. 20 But I don't believe that it would have 09:03:23 21 been either practical or relevant to do that kind of 22 comparison, principally because in a classroom, for 23 example, you have fairly homogenous items or papers. 24 It's in response to a particular assignment or 25 question or task. 09:03:45</p> <p>Page 25</p>

<p>1 BY MR. SILBERT: 10:07:17</p> <p>2 Q Is it more than half a million dollars?</p> <p>3 A I have no idea.</p> <p>4 Q You have documents in your possession, do 10:07:23</p> <p>5 you not, from which you could obtain the answer to 6 that question?</p> <p>7 A I believe I do.</p> <p>8 Q And I'm sure this goes without saying, but 9 I'll ask you to please preserve those documents and 10 not destroy them. 10:07:35</p> <p>11 A Sure. It just isn't interesting or 12 relevant to me, except maybe at tax season.</p> <p>13 Q Do you recall that I took your deposition 14 previously in this case related to patent issues?</p> <p>15 A Yes. 10:07:51</p> <p>16 Q Do you recall testifying at that time that 17 you had been paid or billed approximately \$600,000?</p> <p>18 A I don't have a recollection of that 19 testimony.</p> <p>20 Q Have you been an expert for Cisco in other 10:08:14</p> <p>21 matters besides its disputes with Arista?</p> <p>22 MR. HOLMES: Objection. Vague as to 23 "matters."</p> <p>24 THE WITNESS: Could you repeat the 25 question? 10:08:33</p>	<p>1 A I have no idea. 10:09:52</p> <p>2 Q Do you have records that would contain 3 that information?</p> <p>4 A I might. I'm not sure I've kept billing 5 records. 10:10:13</p> <p>6 Once a case closes and I've been paid, I 7 don't know that I keep all of the files associated 8 with that case. In some instances, the protective 9 order says not to.</p> <p>10 But with respect to billing records, I 10:10:24</p> <p>11 don't know that I've kept records. I have 1099s, 12 but I don't recall if I get paid by Quinn Emanuel or 13 by the company I've been hired to provide opinions 14 for.</p> <p>15 So I'm not entirely certain I could 10:10:45</p> <p>16 reconstruct those numbers.</p> <p>17 Q Have you been retained for other 18 litigation matters by the Kirkland & Ellis law firm?</p> <p>19 A Yes.</p> <p>20 Q How many? 10:11:04</p> <p>21 A And to clarify, in the past or present?</p> <p>22 Q Either. I'm excluding the current 23 litigation and the ITC litigation between Cisco and 24 Arista.</p> <p>25 A Sure. Probably about the same number. 10:11:22</p>
<p>Page 62</p> <p>1 BY MR. SILBERT: 10:08:34</p> <p>2 Q Have you been an expert consultant for 3 Cisco in other matters besides its disputes with 4 Arista?</p> <p>5 MR. HOLMES: Same objection. 10:08:41</p> <p>6 BY MR. SILBERT:</p> <p>7 Q And I'm talking about litigation matters, 8 to address your counsel's objection.</p> <p>9 A I don't recall any.</p> <p>10 There might have been an instance where I 10:09:01</p> <p>11 had an interview with a law firm about a matter 12 related to Cisco. I might have even signed a 13 letter. But I don't recall doing any work or 14 billing any hours. I don't think I've actually done 15 any work for Cisco in any other matters. 10:09:16</p> <p>16 Q Have you been retained previously by the 17 Quinn Emanuel law firm for other litigation matters?</p> <p>18 A I have.</p> <p>19 Q How many times?</p> <p>20 A Hard to say. Maybe three or four. 10:09:37</p> <p>21 Q Apart from this case?</p> <p>22 A Yes.</p> <p>23 Q And what's the total amount, to the best 24 of your knowledge, that you were paid in those other 25 matters, where you were retained by Quinn Emanuel? 10:09:48</p>	<p>1 Three, four. Could be a couple more. 10:11:24</p> <p>2 Akamai/Limelight was Kirkland.</p> <p>3 Q And is it likewise true that you don't 4 know, as you sit here today, how much you've been 5 paid in those matters? 10:11:42</p> <p>6 A That's correct. It would be the same 7 answer for Quinn Emanuel.</p> <p>8 Q And I take it your answer is the same 9 about whether or not you have records that would 10 reflect that information. 10:11:52</p> <p>11 A That's correct.</p> <p>12 Q And I understand that you don't know what 13 you may have kept from matters that have concluded. 14 But again, I'll ask you, to the extent you do have 15 documentation, to please preserve it. 10:12:01</p> <p>16 A I will listen to advice of counsel, my 17 counsel, as to whether I should do that or not.</p> <p>18 Q Do you hope to get more litigation 19 consulting work from Cisco in the future?</p> <p>20 A I don't know that I have opinions one way 21 or the other. I would be fine if I didn't, I would 22 be fine if I did. I take each matter as it comes 23 and evaluate it for what it is.</p> <p>24 Q How long did you spend reviewing source 25 code to formulate your opinions in this case? 10:12:46</p>

<p>1 A That is hard to say for several reasons. 10:12:56</p> <p>2 I certainly spent time here at Keker</p> <p>3 reviewing Arista source code. I've spent time</p> <p>4 reviewing -- let me stop for a second. For that, I</p> <p>5 don't recall how many hours I was here. I think it 10:13:15</p> <p>6 was over the course of three days.</p> <p>7 I've also reviewed Cisco source code in</p> <p>8 this particular matter, and I've spent many hours in</p> <p>9 the '944 and '945 cases reviewing Arista and Cisco</p> <p>10 source code. At least some of that review is 10:13:37</p> <p>11 relevant specifically to CLI, and much of that time,</p> <p>12 especially with respect to understanding Arista</p> <p>13 source code, was just understanding the structure of</p> <p>14 the code, how it works, key features like SysDB, how</p> <p>15 it relates to things like CLI. 10:14:02</p> <p>16 So it would be hard to give you any sort</p> <p>17 of specific number.</p> <p>18 Q How many lines of code are in Cisco's IOS</p> <p>19 source code?</p> <p>20 MR. HOLMES: Objection. Vague. 10:14:22</p> <p>21 THE WITNESS: It depends on the version of</p> <p>22 IOS, whether it's IOS XE, XR, NX-OS, what version of</p> <p>23 the code itself, what train of the code.</p> <p>24 And then for any particular versions, or</p> <p>25 in general, it can vary significantly. So I don't 10:14:45</p>	<p>1 something I'm sitting there and counting in terms 10:16:23</p> <p>2 of, okay, I looked at this file. How many lines are</p> <p>3 in this file? Did I look at every line this time?</p> <p>4 What did I look at last time?</p> <p>5 The best I can tell you is that I've 10:16:39</p> <p>6 looked at a lot of source code; certainly, thousands</p> <p>7 of lines of code for both Cisco and Arista.</p> <p>8 Q Did you know -- sorry. Were you finished?</p> <p>9 A Potentially tens of thousands or hundreds</p> <p>10 of thousands. 10:16:52</p> <p>11 You narrowed it to this particular</p> <p>12 proceeding. But over the course of this</p> <p>13 investigation or this proceeding and then the</p> <p>14 two ITC investigations, I'd be surprised if it were</p> <p>15 less than a million. 10:17:05</p> <p>16 Q You think you've personally read a million</p> <p>17 lines of code from each Cisco and Arista?</p> <p>18 A I don't know if it's each, but like I</p> <p>19 said, I've looked at a lot of code. And as I said,</p> <p>20 I would be surprised if it was less than a million 10:17:21</p> <p>21 lines of code.</p> <p>22 Q Do you know how many lines of code are in</p> <p>23 Arista's EOS source code?</p> <p>24 A No, not off the top of my head.</p> <p>25 Q Do you know a ballpark number? 10:17:32</p>
<p>Page 66</p> <p>1 know that I have a specific number for you. 10:14:54</p> <p>2 BY MR. SILBERT:</p> <p>3 Q Do you know how many lines of code are in</p> <p>4 IOS version 15?</p> <p>5 A No. I don't have that number memorized. 10:15:04</p> <p>6 Q Do you think it's more than 20 million?</p> <p>7 A I don't recall specifically enough to say</p> <p>8 yes or no to that question. There's lots of</p> <p>9 different versions. I just don't have the number</p> <p>10 memorized. 10:15:26</p> <p>11 Q How many lines of IOS code did you</p> <p>12 actually read to formulate your opinions in this</p> <p>13 case?</p> <p>14 A I don't know that I could give you a</p> <p>15 specific number. I don't even really think I could</p> <p>16 guess. 10:15:43</p> <p>17 Q You think it's tens of thousands?</p> <p>18 A I would be surprised if it was less than</p> <p>19 tens of thousands.</p> <p>20 Q Do you think it's hundreds of thousands? 10:16:05</p> <p>21 A Beyond that, I don't really think I could</p> <p>22 give you any specificity.</p> <p>23 I've reviewed a lot of code, both Cisco</p> <p>24 code and Arista code, but I don't know that I could</p> <p>25 give you a ballpark number. It's obviously not 10:16:19</p>	<p>Page 68</p> <p>1 A No. And again, it's the same question 10:17:33</p> <p>2 that -- there are different versions of EOS.</p> <p>3 There's different versions of EOS that have been</p> <p>4 produced, 20 or 30. Again, I don't remember</p> <p>5 specifically. And each one has a different number 10:17:46</p> <p>6 of lines of code.</p> <p>7 I actually, at some point, recall going</p> <p>8 through and doing a line count of each of the</p> <p>9 versions, but I just don't have those numbers</p> <p>10 memorized. 10:18:06</p> <p>11 Q You say in your report that Cisco has</p> <p>12 spent hundreds of millions of dollars developing</p> <p>13 IOS; is that right?</p> <p>14 A You would have to point me to the</p> <p>15 paragraph in my report. It sounds vaguely familiar. 10:18:14</p> <p>16 Q Sure. Why don't you take a look at</p> <p>17 paragraph 43 on page 12.</p> <p>18 A Okay.</p> <p>19 Q Do you see the statement I'm referring to?</p> <p>20 A Yes. 10:18:30</p> <p>21 Q Do you know what portion of those hundreds</p> <p>22 of millions of dollars was spent developing the CLI?</p> <p>23 A Off the top of my head, no. I think this</p> <p>24 is referencing one of the exhibits to Cisco's motion</p> <p>25 for preliminary injunction, the declaration. There 10:18:49</p>

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<p>1 network switch vendors' use of CLI modes, prompts, 11:19:24 2 or responses, command responses, that are used in 3 Cisco IOS? 4 MR. HOLMES: Same objections. 5 THE WITNESS: That covers a lot of ground. 11:19:41 6 And what I would say is, I would defer to what my 7 report says. 8 I've included the opinions in my report. 9 And to the extent I haven't addressed one of the 10 particular aspects that are within the scope of your 11:19:54 11 question, it shouldn't be meant that I agree with 12 his findings. 13 BY MR. SILBERT: 14 Q I'm not -- again, to be clear, I'm not 15 asking you whether you agree with them. I'm asking 11:20:05 16 you what you've disclosed as your opinions in your 17 report. 18 Isn't it true that in your reports, you 19 don't dispute anywhere the accuracy of the data that 20 Dr. Black presents in his opening report on the 11:20:21 21 number of CLI -- and identity of CLI elements used 22 in Cisco's CLIs that are also used by other network 23 device vendors? 24 MR. HOLMES: Objection. Vague, compound. 25 The documents speak for themselves. 11:20:37</p> <p style="text-align: right;">Page 102</p>	<p>1 "Dell's corporate representatives stated under oath 11:22:30 2 that Dell had not copied Cisco's IOS CLI and that he 3 was not aware of anyone else in the industry copying 4 Cisco, and that Dell has its own commands that 5 others have not used," and then you quote some 11:22:45 6 testimony on the next page there, right? 7 A I do see that. 8 Q Do you believe that it's a balanced and 9 fair appraisal of the evidence that you've reviewed 10 in the case to say that you're not aware of any 11:22:56 11 evidence that Dell has copied Cisco CLI? 12 A I think that you have to look at the 13 opinions that I've included in the middle of that 14 paragraph. 15 And what I'm saying is, I have seen no 11:23:29 16 such evidence that even comes close to this level of 17 copying with respect to HP, and then similarly for 18 Dell. 19 The analysis that I've done has been with 20 respect to Arista. And as I testified to this 11:23:43 21 morning with respect to copying and plagiarism, part 22 of what you need to do is to look at the evidence 23 beyond just the existence of similarities. 24 You can start with similarities and 25 progress from there. In the case of Arista, there 11:24:04</p> <p style="text-align: right;">Page 104</p>
<p>1 THE WITNESS: I would essentially give you 11:20:40 2 the same answer that I gave to the last question. 3 I think the report speaks for itself, and 4 the point really is, even though I haven't responded 5 to his particular statements doesn't mean that I 11:20:53 6 accept his data as correct. 7 BY MR. SILBERT: 8 Q Your testimony is that you've seen no 9 evidence that other switch vendors besides Arista 10 and Huawei have copied Cisco CLI; is that right? 11:21:09 11 A I believe there's an opinion along those 12 lines. You can point me to the paragraph in my 13 report that you're referring to. 14 Q Okay. Let's take one specific example. 15 I'm looking at your opening report, which is 11:21:31 16 Exhibit 1538. Would you look, please, at 17 paragraph 97 on page 39? 18 I must have that wrong. It must be your 19 rebuttal report. Yeah, I apologize. I meant to say 20 your rebuttal report. 11:22:10 21 MR. HOLMES: Which page is that? 22 MR. SILBERT: Page 39, paragraph 97. 23 THE WITNESS: Okay. 24 BY MR. SILBERT: 25 Q Looking at the bottom of page 39, you say, 11:22:27</p> <p style="text-align: right;">Page 103</p>	<p>1 is admissions from Arista corporate representatives 11:24:07 2 and witnesses that they copied commands, 3 documentation, command modes, prompts. The whole 4 list of things. 5 There isn't that kind of evidence for HP 11:24:25 6 and Dell. And to the extent that as one of its 7 defenses, Arista and Dr. Black want to say that Dell 8 has copied, then there would need to be some 9 additional evidence beyond just the similarities in 10 commands. 11:24:47 11 And so based on the evidence that I've 12 seen, which wasn't really the focus of my 13 investigation, to generate evidence or ask for 14 evidence that would potentially require subpoenaing 15 Dell and HP, there isn't any such evidence of 11:25:04 16 copying. 17 And to the extent Dr. Black makes an 18 argument that there is copying based on 19 similarities, I'm saying in paragraph 97 that it 20 doesn't rise to the level of evidence with respect 11:25:23 21 to Arista's copying. 22 Q Would you please look at Exhibit I to the 23 Black report, Exhibit 1540? 24 You reviewed this exhibit carefully before 25 you prepared your rebuttal report, didn't you? 11:25:53</p> <p style="text-align: right;">Page 105</p>

<p>1 A I did. 11:25:55</p> <p>2 Q Exhibit A is titled "Overlapping Dell and 11:26:05</p> <p>3 Cisco CLI Commands," correct?</p> <p>4 A Yes.</p> <p>5 Q And you don't, anywhere in your report, 11:26:05</p> <p>6 either of your reports, dispute that both Cisco and</p> <p>7 Dell use the CLI commands that are listed here in</p> <p>8 Exhibit A, do you?</p> <p>9 A I think I've testified to that question 11:26:21</p> <p>10 earlier.</p> <p>11 I haven't -- I don't recall, sitting here 11:26:40</p> <p>12 right now, where I've addressed any of these</p> <p>13 commands specifically. It certainly might be in the</p> <p>14 report somewhere. And because I haven't addressed</p> <p>15 it, it shouldn't be interpreted that it's an</p> <p>16 acceptance of this information.</p> <p>17 I would also point out that there are 11:27:01</p> <p>18 commands that are not at issue in this case, and so</p> <p>19 there's really a question of relevancy of at least</p> <p>20 some of this information.</p> <p>21 Q There are 1,652 CLI commands listed in 11:27:18</p> <p>22 Exhibit I, correct?</p> <p>23 A That's what the last number on the last</p> <p>24 page reads.</p> <p>25 I'd also note that there are things like 11:27:18</p>	<p>1 So I haven't gone through and confirmed 11:28:50</p> <p>2 that every one of these commands that Dr. Black</p> <p>3 alleges are commands are commands. I've looked at</p> <p>4 what he's used this appendix to identify and the</p> <p>5 opinions that are based on this appendix and 11:29:05</p> <p>6 rebutted those in my report.</p> <p>7 BY MR. SILBERT:</p> <p>8 Q Do you have any explanation at all for how</p> <p>9 Dell came to use more than 1,000 of the same CLI</p> <p>10 commands that Cisco uses other than that it copied 11:29:18</p> <p>11 Cisco?</p> <p>12 MR. HOLMES: Objection. Calls for</p> <p>13 speculation, calls for a legal conclusion.</p> <p>14 THE WITNESS: I haven't tried to answer</p> <p>15 that question. I don't think it's relevant to the 11:29:30</p> <p>16 analysis that I've been asked to perform.</p> <p>17 And to the extent that Dr. Black has</p> <p>18 derived opinions from his Appendix I, I've rebutted</p> <p>19 those opinions in my report.</p> <p>20 BY MR. SILBERT: 11:29:43</p> <p>21 Q Well, you stated in your report that --</p> <p>22 and you just told me a minute ago that you're not</p> <p>23 aware of evidence that any other -- any other</p> <p>24 network device vendor has copied Cisco CLI, correct?</p> <p>25 A I think -- 11:29:55</p>
<p>Page 106</p> <p>1 1,637, which is the single word "UDP." And so I'm 11:27:22</p> <p>2 not aware -- and this goes to the incompatibility of</p> <p>3 Appendix I. Things like "traceroute" by itself as a</p> <p>4 single word isn't potentially relevant with respect</p> <p>5 to copying. 11:27:43</p> <p>6 And again, the fact that you have single</p> <p>7 words like "UDP," "TCP," isn't necessarily evidence</p> <p>8 of copying. I think you have to look at that</p> <p>9 evidence, and it's different in scope than the kinds</p> <p>10 of things that have been identified as part of the 11:28:04</p> <p>11 508 commands that Arista has copied, plus all the</p> <p>12 other evidence where Arista has said they copied.</p> <p>13 Q Have you ever counted the number of</p> <p>14 single-word commands that are listed in Exhibit I?</p> <p>15 A No, I haven't tried to come up with a 11:28:19</p> <p>16 specific number.</p> <p>17 Q What is your best explanation for how Dell</p> <p>18 came to use more than 1,000 of the same CLI commands</p> <p>19 that Cisco uses without copying Cisco?</p> <p>20 MR. HOLMES: Objection. Calls for 11:28:34</p> <p>21 speculation.</p> <p>22 THE WITNESS: Again, I haven't confirmed</p> <p>23 that these are actual commands. I would be</p> <p>24 surprised that you could type the word "UDP" at the</p> <p>25 Dell command line and see a result of that. 11:28:46</p> <p>Page 107</p>	<p>1 MR. HOLMES: Objection. Misstates prior 11:29:56</p> <p>2 testimony.</p> <p>3 THE WITNESS: I think my report speaks for</p> <p>4 itself.</p> <p>5 BY MR. SILBERT: 11:30:00</p> <p>6 Q You don't think that the information</p> <p>7 presented in Appendix I showing more than 1,000</p> <p>8 overlapping commands between Dell and Cisco is</p> <p>9 evidence that Dell copied Cisco CLI?</p> <p>10 MR. HOLMES: Objection. Asked and 11:30:15</p> <p>11 answered, calls for speculation and a legal</p> <p>12 conclusion.</p> <p>13 THE WITNESS: So to be clear, I don't</p> <p>14 agree that these are necessarily Dell and Cisco CLI</p> <p>15 commands. There's also instances where you have 11:30:25</p> <p>16 single-word commands.</p> <p>17 And so I think there's additional analysis</p> <p>18 that one could perform to answer the question about</p> <p>19 whether or not this is evidence of copying.</p> <p>20 Another consideration is, as I testified 11:30:42</p> <p>21 to earlier, that the -- even assuming that</p> <p>22 everything in Appendix I is correct and you factor</p> <p>23 out all of the single words and factor out all the</p> <p>24 commands that may not be commands, and you have some</p> <p>25 resulting number, that that by itself is not 11:30:59</p> <p>Page 109</p>

<p>1 evidence of copying; that -- as I testified to 11:31:01 2 earlier, that just because I have similarities in 3 words, isn't by itself sufficient to justify a 4 conclusion that there was copying. 5 In fact, as I've testified to, you have to 11:31:21 6 be very careful that based on similarities, that you 7 don't immediately conclude without consideration of 8 other factors that there was copying or plagiarism. 9 And it's a much different instance for 11:31:36 10 Dell than it is for Arista, essentially because 11 Arista has testified, and there's significant 12 evidence that says that they actually copied. 13 So getting from similarities to a 14 conclusion that there was copying is one that 15 requires more evidence and analysis than just a 16 listing by itself. 17 BY MR. SILBERT: 18 Q So let me address some of these, one at a 19 time. 20 First of all, you've made the point that 11:31:57 21 not everything in Appendix I might be a command that 22 works, and some of them are single-word commands. 23 Do you understand that in my questions, 24 I've knocked off 600 commands just to give you the 25 benefit of the doubt? 11:32:13</p>	<p>1 answers, and even embedded within the questions and 11:33:30 2 the assumptions you've offered, both suggest that 3 nobody has done this analysis, and that there isn't 4 evidence beyond just a listing of commands who -- 5 you seem to have admitted in your questions -- that 11:33:46 6 may not be commands or are single words, call into 7 question how useful the data is as a dataset. 8 BY MR. SILBERT: 9 Q Well, no. I'm being conservative to give 10 you the benefit of the doubt, because the numbers 11:34:00 11 are so enormous, it just doesn't make a difference. 12 Are you telling the jury that in your 13 opinion, it's plausible that Dell is using more than 14 1,000 of the same multiword CLI commands that Cisco 15 uses, and that that situation exists without Dell 11:34:20 16 having copied Cisco? 17 MR. HOLMES: Same objections. 18 THE WITNESS: What I would tell the jury 19 is, nobody has done the analysis, that there isn't 20 the level of evidence that exists for copying from 11:34:33 21 Dell to -- that Dell copied Cisco as there is for 22 Arista copying Cisco. 23 And to the extent you look at this data, 24 that the data doesn't pass simple analytical checks, 25 just looking at it. 11:34:52</p>
<p>Page 110</p> <p>1 A I think that's actually fairly 11:32:16 2 illuminating, the fact that you don't have a 3 specific number, and there isn't this analysis, and 4 Dr. Black hasn't done this analysis. So do you 5 knock off 600 or 700 or 900 or 1,200? 11:32:27 6 Q Or 300? 7 A Or 300 or none? Because this analysis 8 hasn't been conducted, Dr. Black hasn't done the 9 analysis, he hasn't come up with a list of confirmed 10 commands that are more than common singleton words 11:32:44 11 in some instances, and then taken the next step to 12 identify some additional evidence beyond the 13 similarity, I think it's inappropriate to draw a 14 conclusion that they were copied. 15 Q As far as you're concerned, as an expert 11:33:01 16 in this field, it's perfectly plausible to you that 17 Dell would use more than 1,000 of the same CLI 18 commands that Cisco uses, multiword commands, and 19 not have copied Cisco CLI? 20 MR. HOLMES: Objection. Misstates prior 11:33:18 21 testimony, assumes facts not in evidence, calls for 22 a legal conclusion. 23 THE WITNESS: I think there's more to this 24 analysis that has to be performed. 25 And I think your questions and the 11:33:28</p> <p>Page 111</p>	<p>1 I haven't done the analysis of Appendix I 11:34:54 2 and the commands, so somebody would have to do that 3 analysis. Dr. Black hasn't done that analysis. 4 BY MR. SILBERT: 5 Q What's your basis for -- 11:35:06 6 A Let me finish, please. 7 Q Please, go ahead. 8 A To the extent that somebody were to 9 suggest that this is evidence of copying, to me, it 10 suggests it's a place to start. Okay. Maybe 11:35:18 11 somebody should look to what Dell is doing. But by 12 itself, it's not evidence of copying. They could 13 have copied Arista CLI. 14 And so I need more evidence. I need to be 15 able to do the analysis. I need to understand to 11:35:37 16 the degree to which that analysis is relevant with 17 respect to determining whether Arista and Cisco are 18 copying. 19 And I would tell the jury, there's 20 potential here to do some additional analysis and to 11:35:51 21 ask questions. But I don't believe that by itself 22 it's really sufficient to demonstrate copying at the 23 level that Arista has. 24 Q What's your basis for saying that 25 Dr. Black, quote, hasn't done the analysis? 11:36:06</p> <p>Page 113</p>

<p>1 The time is 12:44 p m. 12:44:05</p> <p>2 BY MR. SILBERT:</p> <p>3 Q Good afternoon, Dr. Almeroth.</p> <p>4 Is it your opinion that Arista EOS has the 12:44:13</p> <p>5 same look and feel as Cisco IOS?</p> <p>6 A Could you repeat the question?</p> <p>7 Q Yeah.</p> <p>8 Is it your opinion that Arista EOS has the 12:44:34</p> <p>9 same look and feel as Cisco IOS?</p> <p>10 A I recall an opinion to that effect, or at 12:44:34</p> <p>11 least citing to testimony that's at least similar,</p> <p>12 but you'd have to show me in the report, because I'm</p> <p>13 not sure it's exactly the same. And I can certainly</p> <p>14 look in the report if you'd like.</p> <p>15 Q You might have stumped me there. Let's 12:44:58</p> <p>16 see.</p> <p>17 A And I can certainly tell you the basis for 12:45:05</p> <p>18 my hesitation.</p> <p>19 Q What's the basis for your hesitation?</p> <p>20 A I'm not sure if the quote is about EOS in 12:45:05</p> <p>21 general or the CLI.</p> <p>22 Q Well, that's a fair point.</p> <p>23 Do you think -- why don't I try to narrow 12:45:20</p> <p>24 the question.</p> <p>25 Do you think that -- strike that. 12:45:20</p>	<p>1 It's not clear what that question is asking. 12:47:17</p> <p>2 Q How long did you have to interact with the</p> <p>3 Arista EOS operating system to determine that its</p> <p>4 CLI has the same look and feel, in your opinion, as</p> <p>5 the IOS CLI? 12:47:40</p> <p>6 A I'm not sure I would agree with the</p> <p>7 predicate to that question. I didn't have to use it</p> <p>8 to determine that it had the same look and feel. I</p> <p>9 could do that based on other evidence that existed.</p> <p>10 I think, as I've testified to earlier, I 12:48:04</p> <p>11 have more experience configuring a Cisco router than</p> <p>12 I do an Arista router.</p> <p>13 But certainly in my experience in testing 12:48:20</p> <p>14 Arista routers, which extends back to the prior</p> <p>15 litigation, it's further evidence that would confirm 12:48:20</p> <p>16 my own opinion that the CLI has the same or similar</p> <p>17 look and feel.</p> <p>18 Q Are you telling me that you formed the 12:48:41</p> <p>19 opinion that the Arista CLI has the same or similar</p> <p>20 look and feel to Cisco's CLI without actually using 12:48:41</p> <p>21 the Arista CLI?</p> <p>22 A I don't know that I'm saying that. I</p> <p>23 don't think that there's a causal or a temporal</p> <p>24 relationship there.</p> <p>25 I think that you can determine that it has 12:48:58</p>
<p>1 Is it your opinion that the Arista EOS CLI 12:45:21</p> <p>2 has the same look and feel as the Cisco IOS CLI?</p> <p>3 A I believe that's correct, but I would 12:45:41</p> <p>4 defer to where I've discussed that opinion in my</p> <p>5 report.</p> <p>6 I think that there is deposition testimony</p> <p>7 or evidence that that was Arista's objective. And</p> <p>8 as I also testified to, I believe there's a sentence</p> <p>9 somewhere in the report that as part of my testing,</p> <p>10 I felt like the Arista CLI had the same look and 12:46:05</p> <p>11 feel as Cisco. And that includes both the commands,</p> <p>12 the output of the commands, the help descriptions,</p> <p>13 the modes, and more than just the command itself.</p> <p>14 Q Now, let me ask you the broader question.</p> <p>15 Is it your opinion that the Arista EOS 12:46:31</p> <p>16 operating system has the same look and feel as</p> <p>17 Cisco's IOS operating system?</p> <p>18 A I'm not sure what that question means.</p> <p>19 I'm not sure how an operating system would have a</p> <p>20 look and feel and to whom it would have a similar 12:46:52</p> <p>21 look and feel as opposed to, say, the CLI, which</p> <p>22 could be from a user perspective.</p> <p>23 Is it a user? They typically aren't</p> <p>24 exposed to the details of the operating system. Is</p> <p>25 it from a program or an architecture perspective? 12:47:14</p>	<p>1 the same look and feel based on what the 12:49:00</p> <p>2 documentation says. But certainly the fact that I</p> <p>3 did use the Arista CLI was another source of</p> <p>4 evidence that would confirm my opinion that the CLI</p> <p>5 has the same look and feel. 12:49:13</p> <p>6 Q When you did use the Arista CLI, could you</p> <p>7 tell right away that it had the same or a similar</p> <p>8 look and feel to the Cisco CLI?</p> <p>9 A Not sure what sort of time frame would be</p> <p>10 required for "right away." 12:49:34</p> <p>11 Q Within the first five minutes?</p> <p>12 A Certainly, maybe. I don't recall a</p> <p>13 specific point in time when there was the tripping</p> <p>14 of a threshold that said, "Oh, okay. This</p> <p>15 definitely has the same look and feel." 12:50:01</p> <p>16 But certainly from my experience in using</p> <p>17 the Arista switches, and this even goes back to</p> <p>18 testing I did in the '944 ITC hearing, that plugging</p> <p>19 in the Ethernet cable into the console port, booting</p> <p>20 it up, logging in, executing commands, were 12:50:25</p> <p>21 instances where the look and feel were very similar.</p> <p>22 Q What scientifically valid methodology did</p> <p>23 you use to determine whether Arista's EOS CLI and</p> <p>24 Cisco's IOS CLI have the same or a similar look and</p> <p>25 feel? 12:50:52</p>

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<p>1 MR. HOLMES: Objection. Vague. 12:50:54</p> <p>2 THE WITNESS: Your question asks about 12:51:04</p> <p>3 scientifically valid. I think I've gone through the 12:51:04</p> <p>4 analysis that I used in the report. We can 12:51:04</p> <p>5 certainly step through that. 12:51:04</p> <p>6 From memory, it would be things like the 12:51:04</p> <p>7 similarity in the user manuals, the types of command 12:51:04</p> <p>8 and command expressions, the exec modes, the 12:51:04</p> <p>9 prompts, the output. You know, those as instances 12:51:04</p> <p>10 of logging into the router and being able to 12:51:28</p> <p>11 configure it and see information in very similar 12:51:28</p> <p>12 ways was, for me personally, as part of my 12:51:28</p> <p>13 evaluation, a determination that the look and feel 12:51:28</p> <p>14 was similar.</p> <p>15 And to the extent you have found 12:51:51</p> <p>16 paragraphs in the report that cite to the evidence, 12:51:51</p> <p>17 I think I go through all of that in the report as 12:51:51</p> <p>18 well.</p> <p>19 BY MR. SILBERT:</p> <p>20 Q Do you have any basis to assert that the 12:52:01</p> <p>21 methodology that you used to compare the look and 12:52:01</p> <p>22 feel of the EOS CLI and the IOS CLI is a 12:52:01</p> <p>23 scientifically valid one?</p> <p>24 MR. HOLMES: Objection. Vague, calls for 12:52:15</p> <p>25 a legal conclusion. 12:52:15</p>	<p>1 In some aspects, you look at the basic 12:53:58</p> <p>2 characteristics of the interface, and from an HCI 12:53:58</p> <p>3 design perspective, you get feedback to the user, 12:53:58</p> <p>4 and you allow the user to enter input. 12:53:58</p> <p>5 So it's really input from the user and 12:54:11</p> <p>6 output from the device. And you can look at those 12:54:11</p> <p>7 two aspects of the interface to determine 12:54:11</p> <p>8 similarities. And the existence of key similarities 12:54:11</p> <p>9 would be a basis for determining that the look and 12:54:11</p> <p>10 feel is consistent between two interfaces. 12:54:25</p> <p>11 BY MR. SILBERT:</p> <p>12 Q To your knowledge, has the methodology 12:54:25</p> <p>13 that you used to compare the look and feel of 12:54:25</p> <p>14 Cisco's and Arista's CLIs been published in any 12:54:25</p> <p>15 peer-reviewed journal? 12:54:42</p> <p>16 A I don't see why it wouldn't have been. 12:54:42</p> <p>17 Nothing specifically comes to mind.</p> <p>18 But the first place I would check would be 12:55:04</p> <p>19 to go look at my old HCI book from the mid '80s to 12:55:04</p> <p>20 see its description of the characteristics that 12:55:04</p> <p>21 would define a user interface, and then applying 12:55:04</p> <p>22 those to identify consistencies, or similarities and 12:55:04</p> <p>23 differences between two target interfaces. 12:55:04</p> <p>24 Q Do you know the name of that book? 12:55:21</p> <p>25 A I don't. It's been a few years. 12:55:21</p>
<p>1 THE WITNESS: Can you repeat the question? 12:52:23</p> <p>2 BY MR. SILBERT:</p> <p>3 Q Do you have any basis to assert that the 12:52:32</p> <p>4 methodology that you used to compare the look and 12:52:32</p> <p>5 feel of the EOS CLI and the IOS CLI is a 12:52:32</p> <p>6 scientifically valid methodology?</p> <p>7 MR. HOLMES: Same objections.</p> <p>8 THE WITNESS: Sure. First, I think I've 12:52:51</p> <p>9 gone through some of this discussion in my report</p> <p>10 But from the perspective of comparing an 12:52:51</p> <p>11 interface, the concepts of a look and feel for a 12:52:51</p> <p>12 particular interface are kinds of design concepts 12:52:51</p> <p>13 that were taught in the context of human computer 12:52:51</p> <p>14 interaction or HCI.</p> <p>15 And so the look has to go -- has to do 12:53:06</p> <p>16 with the physical appearance of the commands, the 12:53:06</p> <p>17 prompts, the output. The feel is in a similar vein, 12:53:06</p> <p>18 those kinds of concepts, and can also be judged 12:53:06</p> <p>19 based on the way that a user interacts with the 12:53:06</p> <p>20 interface, the commands that can be entered. 12:53:30</p> <p>21 Other characteristics of the interface</p> <p>22 might contribute to a conclusion that there's a look 12:53:30</p> <p>23 and feel. For example, the ability to use prefixes, 12:53:30</p> <p>24 or another option might be to extend the command by 12:53:30</p> <p>25 typing "tab." 12:53:53</p>	<p>1 Q Do you know the authors? 12:55:23</p> <p>2 A I do not.</p> <p>3 Q Do you know what the cover looks like?</p> <p>4 A No. No. It's only been about 30 years, I 12:55:38</p> <p>5 think.</p> <p>6 Q Is the assertion that two operating system 12:55:38</p> <p>7 interfaces have the same look and feel</p> <p>8 scientifically falsifiable?</p> <p>9 MR. HOLMES: Objection. Vague and calls 12:55:53</p> <p>10 for a legal conclusion.</p> <p>11 THE WITNESS: You asked about operating 12:55:53</p> <p>12 systems in that question?</p> <p>13 BY MR. SILBERT:</p> <p>14 Q Sure. I can narrow it to network device 12:56:00</p> <p>15 operating systems, if that's helpful.</p> <p>16 A My understanding in the line of questions 12:56:00</p> <p>17 was with respect to CLIs, and I know we had a little</p> <p>18 bit of a discussion earlier.</p> <p>19 And not to presume what you intended with 12:56:16</p> <p>20 your question, but my understanding would have been</p> <p>21 that you would have asked about CLIs as opposed to</p> <p>22 the operating systems.</p> <p>23 Q Sure. Well, I said "operating system 12:56:27</p> <p>24 interfaces," but I'm happy to narrow it.</p> <p>25 Is the assertion that two CLIs have the 12:56:27</p>

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<p>1 same look and feel scientifically falsifiable? 12:56:30 2 MR. HOLMES: Same objections. 3 THE WITNESS: I suspect that there are 4 situations where you can look at two interfaces and 5 determine that they don't have the same look and 12:56:41 6 feel. 7 As an example, if you had a GUI versus a 8 CLI, I think that it would be difficult to conclude 9 that they have the same look and feel. 10 There are other aspects of the CLI that 12:56:56 11 one could identify as potentially distinctive. They 12 have different outputs. They use different 13 commands, command structures, or something. 14 I think that you could certainly make an 15 argument that the look and feel of two interfaces 12:57:14 16 was not the same. 17 BY MR. SILBERT: 18 Q I understand you can make arguments. We 19 get paid to do that. 20 But my question to you is, is the 12:57:29 21 assertion that two CLIs have the same look and feel 22 scientifically falsifiable? 23 MR. HOLMES: Same objections. Asked and 24 answered. 25 THE WITNESS: So if my previous answer 12:57:44</p>	<p>1 I don't know if that makes it subjective. 12:59:27 2 or to the extent that it is subjective, whether, 3 really, just about anything is not subjective. 4 I've offered the opinions that I've 5 offered in the report. And whether somebody wants 12:59:41 6 to argue that they're subjective or objective, I 7 guess that's their own subjective analysis. 8 BY MR. SILBERT: 9 Q What are the objective criteria that 10 determine whether two CLIs have the same look and 12:59:56 11 feel? 12 A I think I've answered that question. 13 The way to look at the criteria would be 14 to assess its input mechanisms versus its output 15 mechanisms, and either independently or together, 13:00:14 16 perform an assessment of those aspects of the 17 interface. 18 And then within those aspects of the 19 interface, you can really use a variety of both 20 objective and subjective criteria, if I'm 13:00:32 21 understanding how you're using the terms correctly. 22 You can do things like a count of commands 23 that are the same, similarities in the output, the 24 structure of the commands. Any one or more of those 25 things, depending on their similarity, would 13:00:55</p>
<p>Page 130</p> <p>1 wasn't answering the question to your expectation. 12:57:45 2 then I'm not sure I understand what "scientifically 3 falsifiable" mean. 4 BY MR. SILBERT: 5 Q Can it be proven wrong based on objective 12:57:56 6 criteria? 7 A You've introduced a concept of proof, and 8 I understand that there are different burdens for 9 proof. More likely than not, clear and convincing. 10 It seems that what you're asking about is 12:58:27 11 for, for example, an expert to make a determination. 12 I believe an expert could make a 13 determination and offer the opinion using some sort 14 of methodology that two interfaces were -- had the 15 same look and feels versus not. 12:58:47 16 Q Is the determination of whether two CLIs 17 have the same look and feel an objective 18 determination or a subjective determination? 19 MR. HOLMES: Objection. Vague, calls for 20 a legal conclusion. 12:59:02 21 THE WITNESS: I'm not sure that I could 22 characterize it one way or another. I think that as 23 with just about anything, two experts could look at 24 the same evidence and disagree for their own 25 specific reasons. 12:59:26</p>	<p>1 contribute to the overall conclusion of whether two 13:00:58 2 interfaces have the same look and feel. 3 Q Is there a minimum number of commands that 4 need to be the same for two CLIs to have the same 5 look and feel? 13:01:11 6 A I don't think there has to be a minimum 7 number. I think you have to consider all of the 8 evidence. I don't think there's a threshold 9 quantity. 10 I think part of the analysis is to 13:01:23 11 determine what the commands are and look at the 12 similarities in commands. There might be other 13 considerations like the similarities in command 14 hierarchies, the similarity in output. 15 Certainly there might be a hypothetical 13:01:42 16 situation where many of the commands are similar, 17 but the output is so distinctively different that it 18 creates something that's different with respect to 19 the look and feel. 20 I mean, it seems that part of the analysis 13:01:56 21 has to be based on the evidence that's available to 22 do the analysis. 23 Q Could two CLIs have the same look and feel 24 if they have no overlapping multiword commands? 25 MR. HOLMES: Objection. Calls for a 13:02:11</p>

<p>1 hypothetical. 13:02:13</p> <p>2 THE WITNESS: As a hypothetical, I'm 13:02:13</p> <p>3 always adverse to saying that it's not possible 13:02:13</p> <p>4 It might be more difficult in the case 13:02:13</p> <p>5 where there's no overlapping commands. I don't know 13:02:28</p> <p>6 what other aspects of the system might contribute to 13:02:28</p> <p>7 a conclusion that there's the same look and feel. 13:02:28</p> <p>8 If it's a graphical interface and it's 13:02:28</p> <p>9 identical but the commands have slightly different 13:02:28</p> <p>10 names, or the output is identical -- and the output 13:02:49</p> <p>11 is identical, maybe those -- those considerations 13:02:49</p> <p>12 have an impact on whether it's the same look and 13:02:49</p> <p>13 feel.</p> <p>14 BY MR. SILBERT:</p> <p>15 Q Do two CLIs need to have the same modes 13:03:02</p> <p>16 and prompts for them to have the same look and feel? 13:03:02</p> <p>17 MR. HOLMES: Objection. Calls for a legal 13:03:02</p> <p>18 conclusion, incomplete hypothetical. 13:03:02</p> <p>19 THE WITNESS: I think it's a similar 13:03:15</p> <p>20 answer to what I just said. I think it depends. 13:03:15</p> <p>21 You have to look at the evidence that's presented in 13:03:15</p> <p>22 order to make a determination. It depends on the 13:03:15</p> <p>23 other factors I've talked about and the degree to 13:03:15</p> <p>24 which the other factors are present. It really just 13:03:15</p> <p>25 depends. It might be, it might not be. 13:03:41</p>	<p>1 determining the similarity between look and feel. 13:05:14</p> <p>2 Q To your knowledge, was that characteristic 13:05:14</p> <p>3 common to CLIs that existed before both Cisco and 13:05:14</p> <p>4 Arista? 13:05:14</p> <p>5 A As to your question of "common," I'm not 13:05:29</p> <p>6 sure what -- how prevalent it would need to be in 13:05:29</p> <p>7 order to make it common. 13:05:29</p> <p>8 And then you've also identified before 13:05:29</p> <p>9 Cisco and Arista CLIs, which are two different 13:05:29</p> <p>10 dates. I'm not sure which date you're intending. 13:05:45</p> <p>11 Q To your knowledge, did the TOPS-20 CLI 13:05:45</p> <p>12 allow a user to enter prefixes that would be 13:05:45</p> <p>13 expanded to complete commands or command words? 13:05:45</p> <p>14 MR. HOLMES: Objection. Vague as to time, 13:06:05</p> <p>15 foundation. 13:06:05</p> <p>16 THE WITNESS: I have some recollection 13:06:05</p> <p>17 that -- something around that topic. I'd have to go 13:06:05</p> <p>18 back and look at the reports to see if it did or 13:06:05</p> <p>19 not. 13:06:05</p> <p>20 BY MR. SILBERT: 13:06:25</p> <p>21 Q You also mentioned tab expansion as 13:06:25</p> <p>22 something that can affect the look and feel of a 13:06:25</p> <p>23 CLI; is that right? 13:06:25</p> <p>24 A Again, I offered a whole list of examples. 13:06:39</p> <p>25 It could be something that one could use 13:06:39</p>
<p>1 BY MR. SILBERT: 13:03:43</p> <p>2 Q When you refer to "other factors" that are 13:03:43</p> <p>3 talked about, some of the other factors you talked 13:03:43</p> <p>4 about is, other characteristics of the interface 13:03:43</p> <p>5 were the use of prefixes; is that correct? 13:03:58</p> <p>6 A I did mention the context of a prefix in a 13:03:58</p> <p>7 previous answer. 13:03:58</p> <p>8 Q And what did you mean when you referred to 13:04:16</p> <p>9 the use of prefixes as something that affects the 13:04:16</p> <p>10 look and feel of a CLI? 13:04:16</p> <p>11 A Sure. So one example might be in, say, 13:04:22</p> <p>12 Cisco and Arista where you're able to enter the 13:04:22</p> <p>13 prefix "EN" for enable instead of entering the full 13:04:22</p> <p>14 command, so the design concept within both user 13:04:22</p> <p>15 interfaces where you're able to enter just enough of 13:04:32</p> <p>16 the command so that the CLI can distinguish, 13:04:32</p> <p>17 disambiguate between commands. 13:04:32</p> <p>18 So since there's no other command that 13:04:32</p> <p>19 begins with EN, that EN is sufficient to notify the 13:04:32</p> <p>20 system that the user wants to go into privileged 13:04:52</p> <p>21 mode. 13:04:52</p> <p>22 And so that concept of entering a minimum 13:04:52</p> <p>23 syntactic length to disambiguate over other commands 13:04:52</p> <p>24 is a characteristic that's common to Cisco and 13:04:52</p> <p>25 Arista, and is a factor that I've considered in 13:05:11</p>	<p>1 consistently across interfaces that might be a 13:06:44</p> <p>2 consideration. Not necessarily so, but maybe. 13:06:44</p> <p>3 Q Are the tab expansion characteristics in 13:06:44</p> <p>4 Cisco's and Arista's CLI similar? 13:06:44</p> <p>5 A I don't recall. I'd have to go back and 13:06:58</p> <p>6 check to the extent that they're there and how 13:06:58</p> <p>7 similar they are. I don't have that detail of both 13:06:58</p> <p>8 of the CLIs memorized. 13:06:58</p> <p>9 Q Is the availability of context-sensitive 13:07:20</p> <p>10 help a characteristic that affects a CLI's look and 13:07:20</p> <p>11 feel? 13:07:20</p> <p>12 MR. HOLMES: Objection. Vague. 13:07:38</p> <p>13 THE WITNESS: I'm not sure exactly what 13:07:38</p> <p>14 you mean by "context-sensitive help." 13:07:38</p> <p>15 BY MR. SILBERT: 13:07:38</p> <p>16 Q For example, pushing "question mark," and 13:07:38</p> <p>17 the CLI interface will return information that it 13:07:38</p> <p>18 thinks is relevant based on the particular context 13:07:38</p> <p>19 in which you pushed the question mark. 13:07:38</p> <p>20 A It's not clear from your question if 13:07:53</p> <p>21 you're entering a question mark after you've entered 13:07:53</p> <p>22 a portion of a command, and then you want to see, 13:07:53</p> <p>23 for example, the options that are available in the 13:07:53</p> <p>24 subtree of that command. 13:07:53</p> <p>25 Q Sure. Why don't you take that example. 13:08:05</p>

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<p>1 A Okay. It could be. It could be one of 13:08:07 2 the factors that one would consider or would go into 3 consideration for look and feel, in combination with 4 other factors that established similarities. 5 Q Does the ability to navigate with the 13:08:23 6 cursor on the screen using up and down arrows affect 7 the look and feel of a CLI? 8 MR. HOLMES: Objection. Vague, calls for 9 a legal conclusion. 10 THE WITNESS: Does it affect it? Does it 13:08:40 11 affect the look and feel? It depends. It depends 12 on what your criteria for evaluation is. Whether 13 it's a distinction that makes a difference in the 14 context of evaluating it, I mean, it depends. 15 BY MR. SILBERT: 13:09:04 16 Q I'm asking you based on your criteria that 17 you use. 18 A I'm not sure I understand the question. 19 The answer is still, it depends. It depends on, in 20 the context of evaluating a look and feel, whether 13:09:17 21 it's a significant difference, whether there are 22 other factors that establish the look and feel to 23 the degree to which navigating with the up and down 24 key is a significant difference. 25 Q Does the ability to use a shortcut like 13:09:44</p>	<p>1 BY MR. SILBERT: 13:11:17 2 Q In a situation where there are certain 3 characteristics of CLIs that are the same and other 4 characteristics that are different, how, using your 5 methodology that you applied in this case, do you 13:11:31 6 determine whether the look and feel of the two CLIs 7 is the same? 8 MR. HOLMES: Objection. Vague and calls 9 for a legal conclusion and incomplete hypothetical. 10 THE WITNESS: It would depend on the 13:11:54 11 situation. It would depend on the degree to which 12 there were similarities and differences. It would 13 depend on, I mean, how different the differences 14 are, how similar the similarities are. 15 BY MR. SILBERT: 13:12:12 16 Q Right. I understand that. 17 But my question is, what -- can you 18 explain to me the criteria that a person would apply 19 in order to make the determination of whether the 20 look and feel of two CLIs is the same when some 13:12:25 21 characteristics of the CLIs are similar and some 22 characteristics are different? 23 MR. HOLMES: Same objection, and compound. 24 THE WITNESS: Well, I think I've described 25 the methodology earlier. You can divide it up into 13:12:39</p>
<p>Page 138</p> <p>1 Control A to move the cursor to the beginning of a 13:09:47 2 line affect the look and feel of a CLI? 3 MR. HOLMES: Objection. Vague, incomplete 4 hypothetical. 5 THE WITNESS: It depends. I think with 13:10:02 6 answers to other examples, it depends. 7 If that's the only difference, or there's 8 other overriding characteristics, you have to look 9 at the different factors that are present and 10 evaluate whether or not there is a difference there. 13:10:24 11 BY MR. SILBERT: 12 Q Does the terminal length affect the look 13 and feel of a CLI? 14 MR. HOLMES: Objection. Foundation, 15 vague, incomplete hypothetical. 13:10:36 16 THE WITNESS: I'm not sure what you mean 17 by "terminal length." 18 BY MR. SILBERT: 19 Q Whether the display shows, say, 20 lines 20 or 40 lines at a time. 13:10:45 21 MR. HOLMES: Same objections. 22 THE WITNESS: It depends. The difference 23 between 20 versus 19, likely not, for example. 24 Again, it depends. But, say, the difference between 25 80 versus one might have more of an impact. 13:11:12</p>	<p>Page 140</p> <p>1 input versus output. There's design characteristics 13:12:42 2 of the interface. And you have essentially a 3 multivariate problem, and you have similarities and 4 differences for each of the potential 5 characteristics. 13:12:57 6 The characteristics might vary between a 7 graphical user interface versus a command line 8 interface. It's not -- I don't know that I can sit 9 here and delineate all of the possible 10 characteristics or factors you would have to 13:13:12 11 evaluate in determining the similarity or the look 12 and feel. 13 But what I can tell you about the 14 methodology is that there are generally a set of 15 characteristics you would consider. And as I've 13:13:25 16 done in this case where you look at commands, 17 command structures, similarities in commands, 18 similarities in the structure of commands, the way 19 commands are input, the prompts, the modes, the 20 output, the help descriptions, intended design based 13:13:42 21 on testimony, the evidence about what customers are 22 looking for, in the report, there really is a whole 23 significant amount of evidence that establishes both 24 a goal of Arista and a desire of its customers. I 25 think those are criteria that go into my evaluation 13:14:09</p>

<p>1 as well and evidence that I've considered. 13:14:12 2 So once you have a set of factors, I think 3 you can look at those similarities, and potentially 4 any differences, and determine, based on the 5 totality of the evidence, that there exists or 13:14:27 6 doesn't exist a similarity in the look and feel 7 BY MR. SILBERT: 8 Q Can you give me any formula or algorithm 9 that is used to solve what you describe as a 10 multivariate problem where some elements are similar 13:14:41 11 and some elements are different? 12 MR. HOLMES: Objection. Vague. 13 THE WITNESS: I don't know that I can give 14 you a formula, specifically. I don't think a 15 formula is required as part of the methodology. I 13:14:54 16 think I've described the methodology numerous times. 17 To the extent you would weight one 18 characteristic versus another, I think I've already 19 testified that it depends on the degree of 20 similarity or the degree of differences. 13:15:12 21 If you have what amounts to significant 22 differences in a particular aspect, to the point 23 where it detracts from a sense of consistency or 24 similarity, then that would rise to the level of 25 being distinctive. 13:15:30</p>	Page 142	<p>1 systems, and evaluated all of that information to 13:16:49 2 reach my conclusions. 3 Q Do you disclose anywhere in your reports 4 how much you weight each factor that you assert as 5 similar or different in reaching your conclusion 13:17:04 6 that the two CLIs have the same or a similar look 7 and feel? 8 MR. HOLMES: Objection. Vague. 9 THE WITNESS: I don't believe that there 10 is a specific weighting that needs to be identified. 13:17:20 11 I don't think that that's a requirement for using a 12 rigorous methodology to reach the conclusion. 13 And I think my report speaks for itself as 14 to the evidence that I've relied on and my own 15 analysis to confirm this concept that the look and 13:17:40 16 feel between the interfaces of Arista and Cisco are 17 the same. 18 BY MR. SILBERT: 19 Q To determine whether two interfaces have 20 the same look and feel, do you need to know whether 13:17:51 21 users would have difficulty distinguishing one from 22 the other? 23 MR. HOLMES: Objection. Vague, calls for 24 speculation. 25 THE WITNESS: It depends. As a 13:18:06</p>	Page 144
<p>1 And I think, ultimately, in this case, 13:15:33 2 that the bar is -- there isn't really a particular 3 question around look and feel. I mean, if you look 4 at the totality of the evidence as I have, it's not 5 difficult to conclude that the look and feel are 13:15:47 6 actually quite similar. 7 BY MR. SILBERT: 8 Q Is it just a question of you know it when 9 you see it? 10 A No, I don't think it's a question of you 13:15:59 11 know it when you see it. And I think that the 12 testimony I've given over the last half an hour or 13 so demonstrates that I've described what the process 14 is or the methodology that I would follow. 15 And I think that it's also described in my 13:16:14 16 report, and there's additional evidence in my report 17 that goes to support my opinions and conclusions on 18 the question of look and feel. 19 Q In forming your opinions on look and feel, 20 did you make a list of the differences between the 13:16:29 21 Cisco CLI and the Arista CLI? 22 A I don't recall specifically making a list 23 of differences. Certainly as part of my evaluation, 24 I considered all of the evidence, including what the 25 manuals say and my own experiences in the operating 13:16:45</p>	Page 143	<p>1 hypothetical, I think it's fairly incomplete. It 13:18:09 2 depends on what the two systems are. 3 The fact that users do have trouble 4 distinguishing between the two interfaces could be 5 supportive of a determination that the look and feel 13:18:22 6 is the same. 7 But at the same time, depending on the 8 other factors, depending on the other evidence, 9 somebody might be able to determine that they are 10 using a different CLI but still be able to establish 13:18:43 11 that they have the same look and feel. 12 BY MR. SILBERT: 13 Q Did you do any type of survey to determine 14 whether actual users have difficulty determining 15 whether they're using a Cisco switch or an Arista 13:18:55 16 switch? 17 A I didn't conduct my own survey. The 18 evidence that I've relied on is in the report that 19 I've cited to, and I think it really goes to what 20 Arista has said, what their objectives were, as 13:19:11 21 their witnesses have testified to. 22 [REDACTED] 23 [REDACTED] 24 [REDACTED] 25 I think there's a lot of evidence in the 13:19:27</p>	Page 145

<p>1 Is one of the things that you assert that 17:05:45 2 the names of the modes were copied? I thought you 3 said previously that it was. I'm just trying to be 4 methodical about it. 5 A I mean, paragraph 180 talks about the 17:05:59 6 asserted command modes and prompts. I think it's 7 the copying of the command mode itself. 8 I'm referencing numerous Arista documents 9 also citing -- I mean, the user manual image that's 10 identified after paragraph 180 identifies what those 17:06:30 11 modes are, including both the names of the modes and 12 the characteristics of what those modes include. 13 their functionality and their role. 14 And I think if you compare that to what's 15 described on page 18 through 20, so for example, 17:06:46 16 after paragraph 62 that talks about what those modes 17 are, how the modes can be used, that's at least part 18 of the concept of defining what the modes are that 19 have been copied. 20 I'm not sure how to describe it any other 17:07:11 21 way than it's the modes and the prompts. 22 Q Okay. Looking at -- well, in any of these 23 places where you show the prompts, maybe the easiest 24 place is in your Exhibit 4, the prompt you list is 25 "router," angle bracket, right, for -- I'm looking 17:07:35</p> <p style="text-align: right;">Page 274</p>	<p>1 the user would see whatever name the user actually 17:09:14 2 assigned to that particular switch to name it, 3 right? And then an angle bracket? 4 A It could be. So if you had two -- two 5 devices that had the same name, they would be the 17:09:27 6 identical prompt. 7 Q You mean a Cisco device and an Arista 8 device? 9 A Correct. 10 Q But if a person named the devices, had two 17:09:37 11 switches in their network and named them 12 differently, then they would see the name of the 13 Cisco device, switch number 37, angle bracket, and 14 then they'd see the name of the Arista device, 15 switch number 82, angle bracket, right? 17:09:54 16 A So the convention would be the same, but 17 the name might be different. And you would still 18 have the angle bracket as identifying what the mode 19 is. And the context of the other modes is the 20 aspect that's being copied from Cisco to Arista. 17:10:14 21 Q Okay. Could you look, please, at page 35 22 of your opening report? 23 A Okay. 24 Q And I'm probably more interested in 25 page 36. But I want to direct your attention to 17:10:57</p> <p style="text-align: right;">Page 276</p>
<p>1 on page 1. And then the prompt for the -- what you 17:07:39 2 call the identical or similar Arista prompt is 3 "switch," angle bracket, right? 4 A That's what I've identified as the -- as 5 an example. 17:07:49 6 Q Okay. That's just an example. 7 A Well, it's generally -- for example, what 8 the host name would be, the convention is you can 9 include what the host name would be as part of 10 identifying what the prompt is. And that's in the 17:08:00 11 context of also using both the angle bracket, and 12 also the hash key, to distinguish between which mode 13 you're in, and then as well as the use of the 14 parenthetical for config, and then also whether it's 15 config, and then dash, and then the description or 17:08:24 16 name of the interface. 17 And so it's that concept of the prompts 18 and the use of the prompts to distinguish between 19 the other modes. And what's specifically being 20 copied is that -- is that prompt itself. 17:08:47 21 Q And just looking at the prompts on page 1 22 where it says "router" and "switch," I think you 23 said this, but in actual operation, the prompt that 24 the user sees, it wouldn't say, "switch," angle 25 bracket, right? It would be -- in normal operation, 17:09:11</p> <p style="text-align: right;">Page 275</p>	<p>1 paragraph 83, which starts at -- on page 35. 17:11:02 2 Do you see that? 3 A I do. 4 Q And feel free to read the whole paragraph. 5 But what you say at the end of the paragraph is, 17:11:15 6 "This process continues recursively until either the 7 parsing engine fails at the root mode," and it goes 8 on from there and explains. And then it says, "In 9 my opinion, this is non-standard behavior, and it is 10 present in both Cisco and Arista programs that I 17:11:35 11 have inspected." 12 Do you see that? 13 A I do. 14 Q What's the significance of your pointing 15 out that in your opinion, this is non-standard 17:11:47 16 behavior, and it's present in both Cisco and Arista? 17 A So this goes to the copying of the code as 18 part of the parsing engine. And what's being copied 19 here is the source code that implements the process 20 that continues -- that performs the parsing. So 17:12:14 21 it's the source code itself. 22 And what's being described is that there 23 are certain telltale aspects of the code that are, 24 in this case, non-standard. There's a couple of 25 other ones that are identified as non-standard as 17:12:33</p> <p style="text-align: right;">Page 277</p>

<p>1 well 17:12:35</p> <p>2 And when you look at those together, it's 17:12:35</p> <p>3 indicative of copying the source code that embodies 17:12:35</p> <p>4 that process.</p> <p>5 Q Really? 17:12:48</p> <p>6 So what you're trying to suggest here is 17:12:48</p> <p>7 that you think that Arista would have copied Cisco's 17:12:48</p> <p>8 parser source code?</p> <p>9 A I think it's the opinion that I'm 17:13:01</p> <p>10 expressing in this section. 17:13:01</p> <p>11 Q Okay. And earlier today when we were 17:13:01</p> <p>12 talking about plagiarism, you told me that it's 17:13:01</p> <p>13 important to be really careful and not just look at 17:13:01</p> <p>14 a similarity before you -- and look at more 17:13:01</p> <p>15 information before you would make an allegation of 17:13:14</p> <p>16 copying, right?</p> <p>17 I'm paraphrasing, but you remember what 17:13:14</p> <p>18 I'm talking about?</p> <p>19 A I do remember that testimony, and that's 17:13:22</p> <p>20 exactly what I'm doing, is, beyond the source code 17:13:22</p> <p>21 similarities, you look for the telltale fingerprint 17:13:22</p> <p>22 of implementing something in the same way.</p> <p>23 So when you see something that's 17:13:41</p> <p>24 non-standard -- for example, the other example is, 17:13:41</p> <p>25 if you copy the text and you happen to have copied a 17:13:41</p>	<p>1 opinion, this is non-standard behavior," right, with 17:15:11</p> <p>2 no citation to any data?</p> <p>3 MR. HOLMES: Objection. Argumentative.</p> <p>4 THE WITNESS: I mean, it's what my opinion 17:15:19</p> <p>5 is based on my experience in programming parsers. 17:15:19</p> <p>6 BY MR. SILBERT:</p> <p>7 Q Are we just supposed to take your word for 17:15:21</p> <p>8 it?</p> <p>9 MR. HOLMES: Objection. Argumentative.</p> <p>10 THE WITNESS: I think you can disagree 17:15:27</p> <p>11 with that opinion, but it's what my opinion is</p> <p>12 BY MR. SILBERT:</p> <p>13 Q Of the 40, at least, switch vendors in 17:15:40</p> <p>14 this industry, how many of them do it in the way</p> <p>15 that's listed in -- described in paragraph 83 and 17:15:40</p> <p>16 how many do it a different way?</p> <p>17 MR. HOLMES: Objection. Compound, vague.</p> <p>18 THE WITNESS: For this particular aspect,</p> <p>19 I haven't had access or looked at the way the</p> <p>20 different vendors implement it. But it's a question 17:15:54</p> <p>21 of how you're parsing commands. It's not specific</p> <p>22 or limited to the way that switch vendors perform</p> <p>23 that kind of processing.</p> <p>24 BY MR. SILBERT:</p> <p>25 Q How many parsers in use in the United 17:16:07</p>
<p>Page 278</p> <p>1 grammatical error, that's indication of something 17:13:46</p> <p>2 that's non-standard.</p> <p>3 So in this instance, when you look across 17:13:46</p> <p>4 the section, in the way that the parsing is</p> <p>5 happening, there are particular aspects of it that 17:13:59</p> <p>6 are non-standard and demonstrates the similarities</p> <p>7 between the way that the parsing happens in both EOS</p> <p>8 and IOS.</p> <p>9 Q What's your basis for asserting that this</p> <p>10 feature that you describe in paragraph 83 is, as you 17:14:17</p> <p>11 put it, non-standard?</p> <p>12 A It's not the typical way that you would do</p> <p>13 the kind of rule-matching that's described in the</p> <p>14 two parsing systems.</p> <p>15 Q How do you know? 17:14:35</p> <p>16 A Based on my expertise in how you can</p> <p>17 program parsers.</p> <p>18 Q What data do you provide to us for us to</p> <p>19 make any kind of independent assessment of whether</p> <p>20 this behavior is, as you put it, non-standard? 17:14:48</p> <p>21 A I think what's included in the report. I</p> <p>22 mean, it's a description of what that processing is.</p> <p>23 I'm not sure what else --</p> <p>24 Q With respect to its standard or</p> <p>25 non-standard character, all you say is, "In my 17:15:08</p>	<p>Page 280</p> <p>1 States do it the way that's described in 17:16:10</p> <p>2 paragraph 83 and how many do it a different way?</p> <p>3 MR. HOLMES: Same objections.</p> <p>4 THE WITNESS: I don't think that I need to</p> <p>5 undertake that level of analysis. 17:16:20</p> <p>6 The way that you phrased it, it seems</p> <p>7 fairly impossible to collect that data and make that</p> <p>8 assessment. So I'm using my experience in parsing</p> <p>9 and the way that it was taught as part of language</p> <p>10 processing and grammars as part of computer science. 17:16:39</p> <p>11 and how I've seen it used and applied over the</p> <p>12 course of my career.</p> <p>13 BY MR. SILBERT:</p> <p>14 Q Okay. Do you know who designed the</p> <p>15 feature of the Arista parser that you are now 17:17:01</p> <p>16 saying, in your opinion, was copied from Cisco</p> <p>17 parser code?</p> <p>18 A I don't recall off the top of my head who</p> <p>19 that was</p> <p>20 Q Did you ever know? 17:17:11</p> <p>21 A I might have. I don't recall, sitting</p> <p>22 here today, if I knew it or not.</p> <p>23 Q Did you ask?</p> <p>24 A I don't recall if I asked or knew it, or</p> <p>25 who it might have been. 17:17:24</p>

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<p>1 Q Do you have any reason to believe that 17:17:25 2 that person, whoever he or she was, actually knew 3 how Cisco's parser code worked when he or she 4 designed this feature in Arista's parser?</p> <p>5 MR. HOLMES: Objection. Vague, compound. 17:17:38</p> <p>6 THE WITNESS: Well, to the extent that it 7 was one person or one person only, whether they had 8 access to Cisco's code or knew how Cisco worked 9 specifically, I don't recall having any additional 10 details on what that was. 17:17:54</p> <p>11 BY MR. SILBERT:</p> <p>12 Q Wouldn't you need to know that before you 13 accuse a company of copying another company's source 14 code?</p> <p>15 MR. HOLMES: Objection. Argumentative. 17:18:02</p> <p>16 THE WITNESS: No, for the reasons that 17 I've laid out in the report; that you can look for 18 telltale signs of non-standard similarities. I 19 think that that, at least in this particular 20 instance, is evidence. 17:18:14</p> <p>21 BY MR. SILBERT:</p> <p>22 Q So this -- what you describe in 23 paragraph 83 is sufficient for you to accuse Arista 24 of copying Cisco's source code, but the fact that 25 Dell might use more than 1,000 multiword CLI 17:18:31 Page 282</p>	<p>1 BY MR. SILBERT: 17:28:46 2 Q Dr. Almeroth, do you still have your 3 report open to page 36?</p> <p>4 A Yes.</p> <p>5 Q Can you look, please, at paragraph 84? 17:28:51</p> <p>6 And again, please feel free to read the 7 whole paragraph to yourself, but I'll just focus on 8 the last sentence where you say, "In my opinion, 9 this," referring to behavior that you described in 10 the Arista parser, "is similar to the end of line" 17:29:09 11 tokens that some of Cisco's parsers use."</p> <p>12 Do you see that?</p> <p>13 A I do.</p> <p>14 Q And is it your opinion that using an end 15 token in a parser is unique to Cisco? 17:29:23</p> <p>16 A It's not just the end of line tokens, it's 17 the "this" and the reference to the tokens as 18 similar as to what's described in the rest of the 19 paragraph.</p> <p>20 So I don't think it's just limited to a 17:29:48 21 similarity in the end of line tokens as it is in the 22 processing of those tokens and the elimination of 23 the matching rules, and then sort of the description 24 that's included in all of paragraph 84.</p> <p>25 Q Are you asserting that Arista copied the 17:30:09 Page 284</p>
<p>1 commands in common with Cisco is, in your opinion, 17:18:36 2 not enough indication for you to think that Dell 3 might have copied Cisco?</p> <p>4 A First of all, I think that those are -- 5 you have not properly included all of the analysis 17:18:49 6 that I've identified in this section. You 7 identified paragraph 83. This extends for several 8 pages. At least onto the next page, there's 9 additional paragraphs. It identifies additional 10 points of relevance with respect to the way the 17:19:10 11 implementations were coded.</p> <p>12 And I think that the distinction with 13 respect to what Arista has done in the context of 14 all of the evidence of copying, and in light of this 15 particular evidence, is completely different and 17:19:27 16 quite overwhelming as compared to a comparison of 17 the commands alone in the instance of Dell.</p> <p>18 MR. SILBERT: Okay. We need to change the 19 tape.</p> <p>20 THE VIDEO OPERATOR: Going off the record, 17:19:41 21 the time is 5:20 p.m.</p> <p>22 (Recess, 5:20 p.m. - 5:29 p.m.)</p> <p>23 THE VIDEO OPERATOR: Back on the record.</p> <p>24 The time is 5:29 p.m.</p> <p>25 /// 17:28:43 Page 283</p>	<p>1 feature you describe in paragraph 84 from Cisco's 17:30:12 2 source code?</p> <p>3 A I believe that that's what this section of 4 the report is saying.</p> <p>5 Q And again, how many -- what data do you 17:30:22 6 provide in your report on how many parsers use the 7 feature that you describe in paragraph 84?</p> <p>8 A Do you mean along the same lines that 9 you asked earlier with respect to how many parsers 10 of different networking vendors, or how many parsers 17:30:46 11 in the entire U.S. calculations -- I mean, is 12 that --</p> <p>13 Q Any -- I don't think you have any data at 14 all, so I don't think it matters.</p> <p>15 But tell me any data at all that you have 17:31:00 16 on parsers -- how many parsers do or don't use the 17 feature that you describe in paragraph 84.</p> <p>18 MR. HOLMES: Objection. Argumentative to 19 the first part of the question.</p> <p>20 MR. SILBERT: I'll give you that one. 17:31:13</p> <p>21 THE WITNESS: So it's based on my 22 experience in the use of parsers and the design of 23 parsers and the way that they operate, that there 24 are many different ways of implementing parsing 25 functionality. 17:31:26 Page 285</p>

	<p>1 A No, not who the particular person is, or 17:39:47 2 at least I don't recall who they are, sitting here 3 today.</p> <p>4 Q Do Cisco's parsers really support the add 17:39:57 5 command feature?</p> <p>6 A I'm not sure where you're --</p> <p>7 Q You refer to -- do you see your</p> <p>8 reference almost at the end of paragraph 86, "add</p> <p>9 command"?</p> <p>10 A I think what I'm describing here is the 17:40:47 11 concept of this feature, and this feature is with 12 respect to the way that the different token types 13 are being processed, not with respect to the 14 specific existence of the add command from EOS.</p> <p>15 Q Do you have any reason to assert that 17:41:03 16 whoever it was that introduced this feature into 17 Arista's parser knew how Cisco's parser behaved when 18 he or she did so?</p> <p>19 A Not that I recall, sitting here today.</p> <p>20 Q Have you identified, with respect to any 17:41:18 21 of these similarities in paragraphs 83 through 86, 22 any similarity in the expression of the -- within 23 the source code itself between Arista and Cisco of 24 these functions?</p> <p>25 A I'm not -- 17:41:36</p>
	<p>Page 290</p> <p>1 MR. HOLMES: Objection. Vague. 17:41:37 2 THE WITNESS: -- sure I understand the 3 question, what you mean by "expression."</p> <p>4 BY MR. SILBERT:</p> <p>5 Q How the source code is actually written to 17:41:42 6 implement the functions that you describe in these 7 paragraphs 83 through 86.</p> <p>8 A Well, there are different languages. But 9 beyond the descriptions of the functionality that 10 I've included in this section, I haven't done a 17:41:56 11 lower-level detail analysis between the two.</p> <p>12 But I've certainly identified the 13 functional similarities and the parts that are 14 specific to the two different parsers.</p> <p>15 MR. SILBERT: Okay. Thank you for your 17:42:22 16 time. I have no further questions.</p> <p>17 MR. HOLMES: None from me. Thank you very 18 much.</p> <p>19 THE VIDEO OPERATOR: This concludes 20 today's videotaped deposition of Dr. Kevin 17:42:29 21 Almeroth. We're off the record at 5:43 p.m. Thank 22 you.</p> <p>23 (Discussion off the record.)</p> <p>24 MR. SILBERT: With gratitude to counsel 25 for reminding me, I'd like to designate this 17:43:07</p>

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1 transcript as highly confidential, outside counsel 17:43:10
 2 only.
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1 I, the undersigned, a Certified Shorthand
 2 Reporter of the State of California, do hereby
 3 certify:
 4 That the foregoing proceedings were taken
 5 before me at the time and place herein set forth;
 6 that any witnesses in the foregoing proceedings,
 7 prior to testifying, were administered an oath; that
 8 a record of the proceedings was made by me using
 9 machine shorthand which was thereafter transcribed
 10 under my direction; that the foregoing transcript is
 11 a true record of the testimony given.
 12 Further, that if the foregoing pertains to
 13 the original transcript of a deposition in a Federal
 14 Case, before completion of the proceedings, review
 15 of the transcript [X] was [] was not requested.
 16 I further certify I am neither financially
 17 interested in the action nor a relative or employee
 18 of any attorney or any party to this action.
 19 IN WITNESS WHEREOF, I have this date
 20 subscribed my name.
 21
 22 Dated: 6/30/2016
 23
 24 <%signature%>
 25 CARLA SOARES
 CSR No. 5908

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 8 I, KEVIN C. ALMEROOTH, do hereby declare
 9 under penalty of perjury that I have read the
 10 foregoing transcript; that I have made any
 11 corrections as appear noted, in ink, initialed by
 12 me, or attached hereto; that my testimony as
 13 contained herein, as corrected, is true and correct.
 14 EXECUTED this _____ day of _____,
 15 2016, at _____, _____.
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 20 KEVIN C. ALMEROOTH
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